

TDMS No. 97003 - 08

Test Type: CHRONIC
Route: SKIN APPLICATION
Species/Strain: MICE/B6C3F1

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]
1,2-Dibromo-2,4-dicyanobutane
CAS Number: 35691-65-7

Date Report Reqsted: 08/21/2007
Time Report Reqsted: 13:25:49
First Dose M/F: 06/25/02 / 06/24/02
Lab: BAT

F_1.Rev.1_M3

C Number: C97003D
Lock Date: 01/31/2005
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
TDMSE Version: 1.8.0

Test Type: CHRONIC

1,2-Dibromo-2,4-dicyanobutane

Time Report Requested: 13:25:49

Route: SKIN APPLICATION

CAS Number: 35691-65-7

First Dose M/F: 06/25/02 / 06/24/02

Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Accidently Killed		1		
Moribund Sacrifice	8	12	8	7
Natural Death	7	7	3	3
Survivors				
Moribund Sacrifice	1			
Terminal Sacrifice	34	30	39	40
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Gallbladder	(49)	(49)	(48)	(49)
Inflammation	3 [1.0]		3 [1.0]	2 [1.0]
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Hyperplasia, Lymphoid				1 [3.0]
Intestine Large, Colon	(50)	(50)	(50)	(50)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Ectopic Tissue			1 [3.0]	
Intestine Small, Ileum	(50)	(49)	(50)	(50)
Inflammation	1 [3.0]			
Ulcer	1 [3.0]			
Peyer's Patch, Hyperplasia, Lymphoid	1 [4.0]			
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Peyer's Patch, Hyperplasia, Lymphoid		1 [4.0]	4 [3.3]	2 [3.0]
Liver	(50)	(50)	(50)	(50)
Basophilic Focus	1	4	5	4
Clear Cell Focus	34	22	29	24
Eosinophilic Focus	21	9	16	16
Fatty Change, Focal	11 [1.4]		4 [1.5]	6 [1.7]
Fatty Change, Diffuse	19 [1.2]	15 [1.1]	11 [1.0]	14 [1.0]
Hematopoietic Cell Proliferation	3 [1.3]	9 [1.3]	2 [1.0]	1 [1.0]
Infarct	1 [4.0]			
Infiltration Cellular, Mononuclear Cell	1 [2.0]			

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

1,2-Dibromo-2,4-dicyanobutane

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CAS Number: 35691-65-7

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Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Inflammation	31 [1.0]	19 [1.1]	27 [1.0]	28 [1.0]
Mineralization	1 [2.0]			
Mixed Cell Focus	14	9	13	12
Necrosis	3 [1.7]	9 [1.9]	5 [1.8]	7 [2.0]
Pigmentation	4 [1.8]	3 [1.3]		
Tension Lipidosis	3	5	3 [1.0]	3 [1.0]
Bile Duct, Cyst	1 [3.0]			
Hepatocyte, Hypertrophy		1 [2.0]		
Mesentery	(10)	(3)	(4)	(2)
Fat, Necrosis	9 [2.9]	3 [3.0]	3 [3.0]	1 [3.0]
Pancreas	(50)	(50)	(50)	(50)
Hyperplasia	1 [1.0]			
Infiltration Cellular, Mononuclear Cell	7 [1.0]		3 [1.0]	6 [1.2]
Inflammation	2 [2.0]			
Vacuolization Cytoplasmic				1 [2.0]
Acinus, Atrophy		2 [1.0]		1 [2.0]
Duct, Cyst				1 [4.0]
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy		1 [2.0]		1 [2.0]
Infiltration Cellular, Mononuclear Cell	35 [1.6]	28 [1.5]	39 [1.5]	40 [1.8]
Necrosis		1 [2.0]		
Stomach, Forestomach	(50)	(50)	(50)	(50)
Hyperplasia, Squamous	1 [1.0]	1 [2.0]	1 [1.0]	1 [2.0]
Inflammation	2 [1.0]			
Ulcer				2 [2.0]
Stomach, Glandular	(50)	(50)	(50)	(50)
Cyst			1 [1.0]	
Erosion		1 [3.0]	1 [1.0]	1 [2.0]
Inflammation	1 [2.0]	1 [1.0]		
Mineralization				1 [2.0]
Glands, Cyst	1 [1.0]	1 [2.0]		2 [1.5]
Glands, Hyperplasia	1 [2.0]	1 [3.0]	2 [2.5]	
Tooth	(31)	(32)	(37)	(35)
Dysplasia			2	1
Malformation	29 [1.4]	32 [1.7]	36 [1.4]	33 [1.8]
Peridontal Tissue, Inflammation	7 [1.7]	2 [2.0]	1 [2.0]	9 [2.0]
Pulp, Inflammation	2 [1.5]			

CARDIOVASCULAR SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

1,2-Dibromo-2,4-dicyanobutane

Time Report Requested: 13:25:49

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First Dose M/F: 06/25/02 / 06/24/02

Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Blood Vessel	(50)	(50)	(50)	(50)
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	9 [1.3]	6 [1.2]	5 [1.0]	3 [1.3]
Infiltration Cellular, Mononuclear Cell	1 [2.0]			
Inflammation		1 [1.0]		
Mineralization		1 [1.0]		
Capillary, Hyperplasia			1 [2.0]	
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Cytoplasmic Alteration		1 [2.0]		
Degeneration	1 [4.0]			
Hypertrophy	22 [1.7]	16 [1.6]	23 [1.5]	21 [1.8]
Pigmentation	2 [1.5]			
Vacuolization Cytoplasmic	1 [2.0]	1 [1.0]	1 [1.0]	
Subcapsular, Hyperplasia	45 [1.8]	46 [1.8]	46 [1.9]	44 [1.7]
Zona Fasciculata, Hyperplasia	6 [2.0]		1 [1.0]	5 [1.4]
Adrenal Medulla	(50)	(49)	(50)	(50)
Hyperplasia		2 [2.5]		
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	26 [1.5]	23 [1.4]	28 [1.4]	25 [1.3]
Parathyroid Gland	(42)	(40)	(43)	(41)
Cyst			1 [2.0]	
Pituitary Gland	(50)	(50)	(49)	(50)
Cyst	3 [1.7]	3 [1.7]	4 [1.0]	6 [1.5]
Hyperplasia	1 [2.0]	1 [2.0]	1 [1.0]	
Thyroid Gland	(50)	(50)	(50)	(50)
Cyst	1 [2.0]			
Infiltration Cellular, Mononuclear Cell			1 [1.0]	
C-cell, Hyperplasia				1 [2.0]
Follicle, Cyst	1 [1.0]		2 [3.0]	
Follicular Cell, Hyperplasia		3 [1.7]	2 [2.5]	1 [2.0]
GENERAL BODY SYSTEM				
None				

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Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
GENITAL SYSTEM				
Coagulating Gland	(0)	(1)	(2)	(1)
Hyperplasia			1 [2.0]	
Inflammation			1 [2.0]	
Epididymis	(50)	(50)	(50)	(50)
Granuloma Sperm			2 [2.5]	2 [2.5]
Inflammation	37 [1.1]	35 [1.0]	35 [1.1]	34 [1.0]
Penis	(0)	(2)	(0)	(0)
Congestion		1 [2.0]		
Preputial Gland	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell				1 [3.0]
Inflammation	38 [1.4]	30 [1.6]	26 [1.4]	28 [1.4]
Duct, Ectasia	2 [2.0]	2 [2.5]	1 [2.0]	4 [2.3]
Prostate	(50)	(50)	(50)	(50)
Atrophy				1 [3.0]
Infiltration Cellular, Mononuclear Cell	20 [1.2]	17 [1.1]	18 [1.1]	14 [1.3]
Inflammation, Suppurative			1 [3.0]	
Seminal Vesicle	(50)	(50)	(50)	(50)
Atrophy				1 [3.0]
Testes	(50)	(50)	(50)	(50)
Mineralization	1 [2.0]		3 [1.0]	1 [1.0]
Germinal Epithelium, Atrophy	4 [1.8]		3 [2.0]	5 [2.2]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Angiectasis	1 [2.0]			
Myelofibrosis		2 [1.5]	2 [1.0]	1 [3.0]
Myeloid Cell, Hyperplasia	3 [2.3]	4 [2.5]	3 [2.0]	3 [2.0]
Lymph Node	(0)	(1)	(3)	(1)
Renal, Hyperplasia, Lymphoid			1 [4.0]	
Lymph Node, Mandibular	(50)	(50)	(50)	(50)
Atrophy	1 [3.0]			1 [3.0]
Hemorrhage		1 [2.0]		
Hyperplasia, Lymphoid	2 [2.0]	1 [2.0]		1 [2.0]
Hyperplasia, Plasma Cell		4 [2.0]	1 [2.0]	
Pigmentation	1 [2.0]	1 [2.0]		
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)

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Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Atrophy	1 [3.0]	1 [2.0]	1 [3.0]	1 [2.0]
Hemorrhage	1 [2.0]		1 [2.0]	1 [2.0]
Hyperplasia, Histiocytic			1 [2.0]	
Hyperplasia, Lymphoid	1 [4.0]	2 [3.5]	1 [3.0]	1 [2.0]
Hyperplasia, Plasma Cell		2 [2.5]		
Inflammation, Suppurative	1 [3.0]			
Inflammation, Granulomatous	1 [3.0]			
Spleen	(50)	(49)	(50)	(50)
Hematopoietic Cell Proliferation	19 [2.3]	13 [2.5]	20 [2.2]	13 [2.5]
Hyperplasia, Histiocytic				1 [3.0]
Hyperplasia, Lymphoid	8 [2.1]	12 [2.1]	12 [1.8]	11 [2.4]
Infiltration Cellular, Polymorphonuclear			1 [3.0]	
Capsule, Degeneration	1 [2.0]			
Lymphoid Follicle, Atrophy	2 [2.5]	4 [2.5]		1 [2.0]
Red Pulp, Atrophy	1 [3.0]	4 [2.5]	1 [2.0]	2 [2.5]
Thymus	(47)	(48)	(46)	(46)
Atrophy	22 [2.5]	19 [2.5]	27 [2.4]	23 [2.5]
Cyst		2 [1.0]		1 [2.0]
INTEGUMENTARY SYSTEM				
Skin	(50)	(50)	(50)	(50)
Hyperplasia			1 [2.0]	
Inflammation			2 [2.0]	
Inflammation, Chronic Active	1 [3.0]			
Ulcer	1 [3.0]		2 [3.0]	
Site Of Application - Dermis, Inflammation, Chronic Active	4 [1.3]	1 [1.0]	7 [1.1]	10 [1.6]
Site Of Application - Epidermis, Hyperplasia	6 [2.0]	12 [1.0]	37 [1.1]	50 [1.6]
Site Of Application - Epidermis, Ulcer			1 [1.0]	3 [2.7]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Osteosclerosis	1 [2.0]			
Skeletal Muscle	(0)	(0)	(1)	(0)

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B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Hemorrhage		1 [2.0]		
Meninges, Infiltration Cellular, Mononuclear Cell			1 [1.0]	1 [2.0]
Spinal Cord	(0)	(0)	(0)	(1)
Atrophy				1 [2.0]
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Hemorrhage		1 [3.0]		1 [2.0]
Infiltration Cellular, Mononuclear Cell	1 [3.0]			
Inflammation	6 [1.7]	5 [2.2]		1 [2.0]
Pigmentation	1 [2.0]	1 [1.0]		
Thrombosis	1 [2.0]			
Alveolar Epithelium, Hyperplasia	6 [1.7]			4 [2.8]
Alveolus, Infiltration Cellular, Histiocyte	5 [2.2]	8 [1.8]	2 [2.0]	3 [1.3]
Bronchiole, Hyperplasia			1 [2.0]	1 [2.0]
Nose	(50)	(50)	(50)	(50)
Inflammation, Suppurative		3 [2.3]		
Polyp, Inflammatory	1 [3.0]		1 [3.0]	
Glands, Dilatation			1 [2.0]	
Nerve, Atrophy			1 [2.0]	
Respiratory Epithelium, Hyperplasia			1 [1.0]	
Respiratory Epithelium, Inflammation	7 [1.4]		1 [1.0]	
Respiratory Epithelium, Metaplasia		1 [3.0]		
Trachea	(50)	(50)	(50)	(50)
Inflammation				1 [1.0]
Glands, Cyst	1 [1.0]			
SPECIAL SENSES SYSTEM				
Eye	(50)	(50)	(50)	(50)
Atrophy		1 [4.0]		
Cornea, Inflammation				2 [1.0]
Lens, Degeneration	1 [3.0]	1 [3.0]		
Retina, Atrophy	2 [4.0]	1 [2.0]		

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B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Harderian Gland	(50)	(50)	(50)	(50)
Fibrosis, Focal		1 [3.0]		
Infiltration Cellular, Mononuclear Cell	31 [1.2]	30 [1.2]	26 [1.2]	30 [1.1]
Inflammation	1 [2.0]		1 [3.0]	
Epithelium, Hyperplasia	2 [2.0]	3 [1.0]		4 [2.0]
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Cyst	3 [1.0]	8 [1.8]	2 [1.5]	6 [1.3]
Hemorrhage				1 [3.0]
Infarct	4 [1.8]	1 [1.0]	4 [1.8]	3 [1.7]
Infiltration Cellular, Mononuclear Cell	1 [2.0]	1 [3.0]		
Inflammation	2 [3.0]			
Mineralization	44 [1.0]	45 [1.0]	46 [1.0]	43 [1.0]
Nephropathy	48 [1.5]	41 [1.2]	48 [1.1]	48 [1.6]
Papilla, Renal Tubule, Necrosis		1 [3.0]		
Renal Tubule, Hyperplasia	12 [1.0]	12 [1.0]	12 [1.0]	7 [1.0]
Urinary Bladder	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	22 [1.2]	19 [1.2]	23 [1.0]	27 [1.2]
Transitional Epithelium, Hyperplasia			2 [2.0]	

*** END OF MALE ***

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B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	10	11	14	11
Natural Death	7	3	6	4
Survivors				
Natural Death		1		
Terminal Sacrifice	33	35	30	35
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(50)	(50)	(50)	(50)
Gallbladder	(50)	(49)	(50)	(50)
Cyst		1 [1.0]		
Inflammation		3 [1.7]	5 [1.0]	2 [1.0]
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Hyperplasia, Lymphoid			1 [3.0]	
Inflammation	3 [2.7]	1 [1.0]		
Necrosis, Fatty	1 [3.0]			
Liver	(50)	(50)	(50)	(50)
Angiectasis		1 [2.0]	1 [1.0]	
Basophilic Focus	1	3		
Clear Cell Focus	14	13	3	8
Cyst		1 [2.0]		
Eosinophilic Focus	6	3	4	4
Fatty Change, Focal	1 [2.0]		1 [2.0]	
Fatty Change, Diffuse	1 [1.0]		4 [1.5]	4 [2.8]
Fibrosis		1 [3.0]		
Hematopoietic Cell Proliferation	6 [1.5]	3 [1.0]	3 [1.0]	5 [1.0]
Infiltration Cellular, Lymphocyte			1 [2.0]	
Inflammation	35 [1.2]	42 [1.2]	37 [1.1]	41 [1.1]
Mixed Cell Focus	13	10	5	7
Necrosis	3 [2.0]	2 [2.0]	8 [1.9]	4 [2.0]
Pigmentation	4 [1.3]	4 [1.5]	1 [1.0]	1 [1.0]
Tension Lipidosis	5	2	4	6

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B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Vacuolization Cytoplasmic Hepatocyte, Hypertrophy	1 [3.0]		1 [1.0]	
Mesentery	(10)	(9)	(6)	(10)
Fat, Necrosis	9 [3.0]	9 [3.0]	6 [3.0]	9 [3.0]
Pancreas	(50)	(50)	(50)	(50)
Cyst	1 [2.0]	2 [3.0]		
Infiltration Cellular, Mononuclear Cell	17 [1.0]	15 [1.1]	17 [1.1]	24 [1.3]
Inflammation		3 [1.7]		
Acinus, Atrophy	1 [2.0]	3 [3.3]		
Salivary Glands	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	31 [1.5]	32 [1.3]	33 [1.5]	36 [1.5]
Stomach, Forestomach	(50)	(50)	(50)	(50)
Cyst	1 [1.0]			
Hyperkeratosis	1 [2.0]			2 [2.5]
Hyperplasia, Squamous	2 [1.5]			2 [2.0]
Inflammation				2 [2.0]
Ulcer				2 [2.0]
Stomach, Glandular	(50)	(50)	(50)	(50)
Cyst	1 [1.0]			
Erosion		2 [2.0]		1 [2.0]
Mineralization			1 [1.0]	1 [2.0]
Glands, Cyst	2 [1.5]	5 [1.0]	4 [1.0]	5 [1.0]
Glands, Hyperplasia		1 [2.0]		
Tooth	(3)	(4)	(4)	(1)
Malformation	3 [1.3]	3 [1.0]	3 [1.0]	1 [1.0]
Peridontal Tissue, Inflammation		1 [2.0]	1 [2.0]	
CARDIOVASCULAR SYSTEM				
Blood Vessel	(50)	(50)	(50)	(50)
Hyperplasia		1 [2.0]		
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	10 [1.0]	2 [1.0]	9 [1.0]	14 [1.0]
Infiltration Cellular, Mononuclear Cell	1 [1.0]		1 [1.0]	1 [2.0]
Inflammation				2 [2.0]
Mineralization	1 [2.0]			
Thrombosis				1 [3.0]
ENDOCRINE SYSTEM				

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Adrenal Cortex	(50)	(50)	(50)	(50)
Hematopoietic Cell Proliferation	2 [2.0]			1 [2.0]
Hypertrophy	2 [2.0]	2 [1.5]		1 [2.0]
Inflammation	1 [2.0]			1 [3.0]
Vacuolization Cytoplasmic			1 [3.0]	1 [3.0]
Capsule, Necrosis, Fatty	1 [2.0]			
Subcapsular, Hyperplasia	50 [2.5]	49 [2.3]	50 [2.2]	49 [2.3]
Zona Fasciculata, Hyperplasia	2 [1.5]	2 [1.5]	1 [2.0]	1 [2.0]
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	1 [2.0]	2 [1.0]		3 [2.0]
Vacuolization Cytoplasmic				1 [3.0]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	4 [1.3]			1 [1.0]
Parathyroid Gland	(38)	(40)	(40)	(41)
Cyst				1 [1.0]
Inflammation, Chronic Active				1 [2.0]
Pituitary Gland	(50)	(50)	(50)	(50)
Angiectasis	1 [2.0]	2 [2.0]	1 [2.0]	1 [3.0]
Cyst	1 [1.0]	1 [1.0]		2 [1.0]
Pars Distalis, Angiectasis		1 [2.0]		
Pars Distalis, Hyperplasia	9 [1.6]	13 [2.2]	16 [1.9]	12 [2.3]
Pars Intermedia, Hyperplasia		1 [1.0]		
Thyroid Gland	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	3 [1.0]	2 [1.0]	3 [1.0]	3 [1.3]
Inflammation, Suppurative	1 [1.0]			
C-cell, Hyperplasia		1 [1.0]		
Follicle, Cyst	2 [1.5]			
Follicular Cell, Hyperplasia	1 [1.0]	3 [1.7]	1 [2.0]	1 [4.0]
Follicular Cell, Hypertrophy	1 [1.0]			

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(50)	(49)	(50)	(50)
Inflammation	18 [1.0]	5 [1.0]	2 [1.0]	7 [1.1]
Duct, Cyst			1 [1.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

1,2-Dibromo-2,4-dicyanobutane

Time Report Requested: 13:25:49

Route: SKIN APPLICATION

CAS Number: 35691-65-7

First Dose M/F: 06/25/02 / 06/24/02

Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Ovary	(50)	(50)	(50)	(50)
Angiectasis		1 [3.0]	3 [2.7]	1 [3.0]
Cyst	7 [2.6]	10 [2.2]	19 [1.9]	13 [2.2]
Hemorrhage			1 [2.0]	
Inflammation, Granulomatous		1 [2.0]		
Mineralization		1 [3.0]		
Pigmentation		1 [2.0]		
Thrombosis	1 [3.0]	1 [3.0]	2 [3.0]	
Periovarian Tissue, Necrosis	1 [3.0]			
Uterus	(50)	(50)	(50)	(50)
Angiectasis	2 [2.0]	1 [3.0]		
Inflammation, Suppurative				1 [4.0]
Thrombosis			1 [2.0]	
Endometrium, Hyperplasia, Cystic	50 [3.1]	49 [2.7]	48 [2.7]	48 [2.9]
Vagina	(0)	(0)	(3)	(0)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Angiectasis		1 [1.0]	1 [3.0]	
Atrophy, Focal	3 [2.0]		1 [2.0]	2 [2.0]
Myelofibrosis	27 [1.3]	29 [1.4]	27 [1.3]	27 [1.4]
Myeloid Cell, Hyperplasia	2 [3.0]			4 [2.0]
Lymph Node	(8)	(6)	(6)	(4)
Hyperplasia, Plasma Cell				1 [3.0]
Iliac, Ectasia			1 [2.0]	
Inguinal, Ectasia		1 [2.0]		
Lumbar, Congestion				1 [2.0]
Lumbar, Ectasia		2 [3.0]	2 [3.0]	
Lumbar, Hyperplasia, Histiocytic				1 [2.0]
Mediastinal, Congestion				1 [3.0]
Mediastinal, Hyperplasia, Histiocytic				1 [2.0]
Renal, Ectasia	2 [3.0]		1 [3.0]	
Lymph Node, Mandibular	(50)	(50)	(50)	(50)
Atrophy			1 [3.0]	
Ectasia		1 [2.0]		
Hyperplasia, Lymphoid	1 [3.0]	4 [2.3]		5 [2.4]
Hyperplasia, Plasma Cell	1 [2.0]			
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)

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Test Type: CHRONIC

1,2-Dibromo-2,4-dicyanobutane

Time Report Requested: 13:25:49

Route: SKIN APPLICATION

CAS Number: 35691-65-7

First Dose M/F: 06/25/02 / 06/24/02

Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Congestion, Chronic				1 [3.0]
Hyperplasia, Histiocytic				1 [2.0]
Hyperplasia, Lymphoid		3 [2.0]	3 [2.7]	2 [2.0]
Hyperplasia, Plasma Cell	1 [2.0]	1 [2.0]	1 [2.0]	2 [2.0]
Inflammation		1 [3.0]		
Spleen	(50)	(50)	(50)	(50)
Fibrosis		1 [3.0]		
Hematopoietic Cell Proliferation	16 [2.4]	19 [2.2]	18 [2.3]	22 [2.5]
Hyperplasia, Lymphoid	13 [2.4]	19 [2.1]	19 [2.3]	16 [2.3]
Pigmentation	7 [1.0]	5 [1.2]	8 [1.3]	6 [1.2]
Lymphoid Follicle, Atrophy	1 [2.0]		4 [2.5]	1 [2.0]
Red Pulp, Atrophy	1 [2.0]		4 [2.3]	3 [2.0]
Thymus	(47)	(47)	(48)	(50)
Atrophy	11 [2.5]	11 [2.4]	13 [2.8]	17 [2.8]
Hyperplasia, Atypical		1 [2.0]		
Hyperplasia, Lymphoid		5 [2.0]	7 [2.1]	4 [2.3]
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(49)	(50)	(50)
Hyperplasia			1 [1.0]	
Skin	(50)	(50)	(50)	(50)
Site Of Application - Dermis, Inflammation, Chronic Active		9 [1.4]	30 [1.3]	28 [1.4]
Site Of Application - Epidermis, Hyperplasia		12 [1.5]	37 [1.2]	49 [1.5]
Site Of Application - Epidermis, Ulcer		1 [3.0]	2 [2.5]	3 [3.0]
Subcutaneous Tissue, Inflammation, Granulomatous				1 [3.0]
Subcutaneous Tissue, Necrosis, Fatty				1 [3.0]
Subcutaneous Tissue, Pigmentation				1 [1.0]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Arthrosis		1 [3.0]		
Osteopetrosis				1 [3.0]
Skeletal Muscle	(1)	(1)	(1)	(1)

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Test Type: CHRONIC

1,2-Dibromo-2,4-dicyanobutane

Time Report Requested: 13:25:49

Route: SKIN APPLICATION

CAS Number: 35691-65-7

First Dose M/F: 06/25/02 / 06/24/02

Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Hemorrhage				1 [1.0]
Pigmentation			1 [2.0]	
Neuron, Necrosis				1 [1.0]
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Hemorrhage		2 [3.0]		2 [3.0]
Inflammation	1 [3.0]	1 [1.0]		3 [2.0]
Pigmentation				1 [1.0]
Alveolar Epithelium, Hyperplasia	1 [2.0]	1 [2.0]		2 [2.0]
Alveolus, Infiltration Cellular, Histiocyte	2 [2.5]	1 [2.0]	2 [2.0]	1 [1.0]
Mediastinum, Inflammation		1 [3.0]		
Serosa, Fibrosis			1 [3.0]	
Nose	(50)	(50)	(50)	(50)
Glands, Cyst				1 [1.0]
Respiratory Epithelium, Inflammation	2 [2.0]			
Trachea	(50)	(50)	(50)	(50)
SPECIAL SENSES SYSTEM				
Eye	(50)	(50)	(50)	(50)
Cornea, Inflammation, Suppurative		1 [3.0]		
Lens, Degeneration	2 [3.0]	2 [2.5]		
Optic Nerve, Degeneration			1 [2.0]	
Harderian Gland	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	31 [1.1]	33 [1.1]	36 [1.2]	36 [1.1]
Epithelium, Hyperplasia	1 [2.0]	1 [3.0]	4 [1.0]	3 [1.7]
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Accumulation, Hyaline Droplet		1 [4.0]		
Amyloid Deposition	2 [2.5]		1 [3.0]	
Cyst			1 [1.0]	

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Time Report Reqsted: 13:25:49

Route: SKIN APPLICATION

CAS Number: 35691-65-7

First Dose M/F: 06/25/02 / 06/24/02

Species/Strain: MICE/B6C3F1

Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Degeneration				1 [2.0]
Infarct	3 [2.3]	2 [2.5]	8 [1.8]	4 [2.0]
Inflammation	2 [2.0]			
Metaplasia, Osseous		1 [2.0]		1 [2.0]
Mineralization	14 [1.2]	8 [1.0]	4 [1.0]	3 [1.0]
Nephropathy	16 [1.3]	15 [1.0]	16 [1.3]	18 [1.1]
Pigmentation			1 [1.0]	
Pelvis, Dilatation			1 [2.0]	
Renal Tubule, Hyperplasia	1 [1.0]	2 [1.5]		
Renal Tubule, Necrosis	1 [3.0]			
Urinary Bladder	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	33 [1.8]	37 [1.3]	38 [1.5]	38 [1.4]

*** END OF REPORT ***